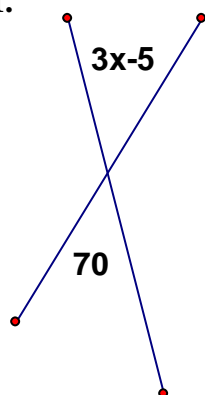


Geometry 201
Problems with Angles

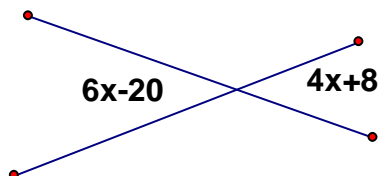
Name _____

Solve for x and y .

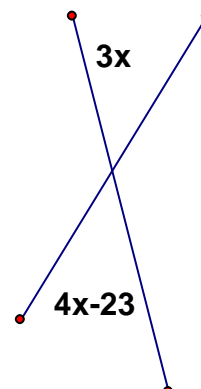
1.



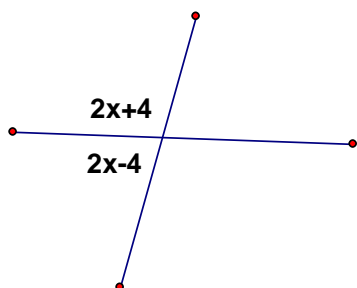
2.



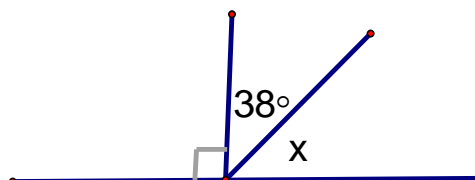
3.



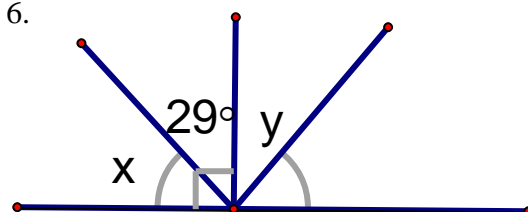
4.



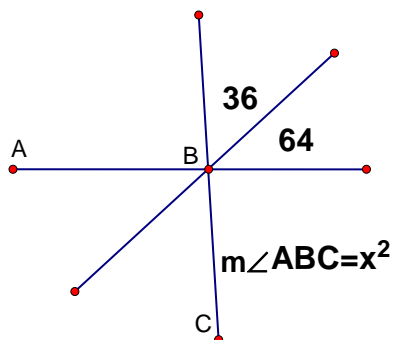
5.



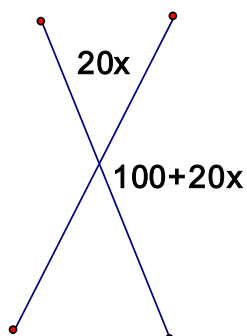
6.



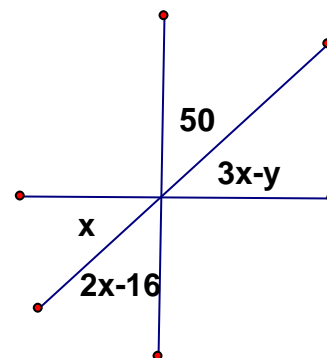
7.



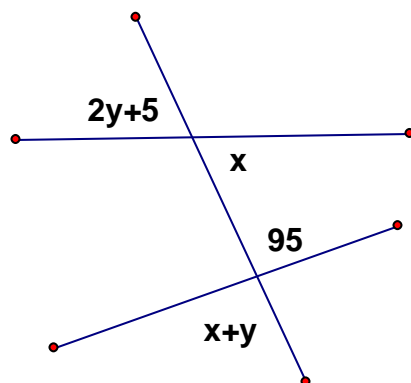
8.



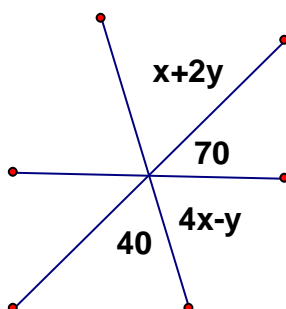
9.



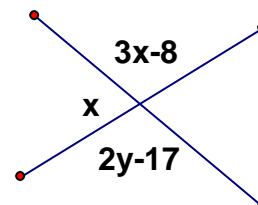
10.



11.



12.



In the diagram, \overrightarrow{OT} bisects $\angle SOU$, $m\angle UOV = 35$, and $m\angle YOW = 120$. Find the measure of each angle.

13. $m\angle ZOY$

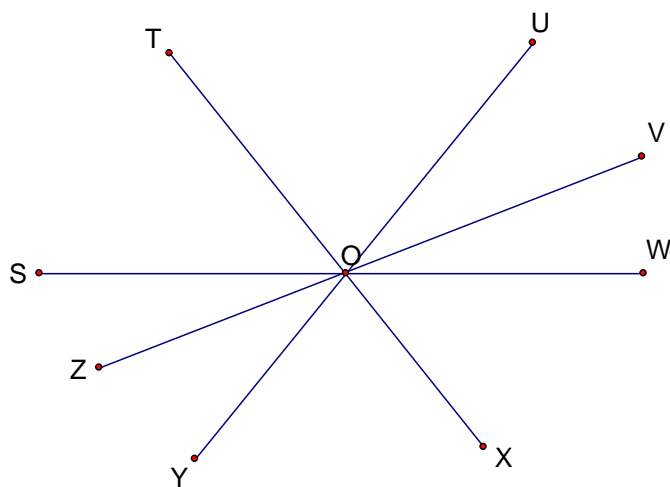
14. $m\angle ZOW$

15. $m\angle VOW$

16. $m\angle SOU$

17. $m\angle TOU$

18. $m\angle ZOT$



If $\angle A$ and $\angle B$ are supplementary, find the value of x and the measure of the angles.

19. $m\angle A = 2x$, $m\angle B = x - 15$

20. $m\angle A = x + 16$, $m\angle B = 2x - 16$

If $\angle C$ and $\angle D$ are complementary, find the value of y and the measure of the angles.

21. $m\angle C = 3y + 5$, $m\angle D = 2y$

22. $m\angle C = y - 8$, $m\angle D = 3y + 2$

Use the given information to write an equation. Solve the equation to find the measures of the two angles described.

23. A supplement of an angle is twice as large as the angle.

24. A complement of an angle is five times as large as the angle.

25. The measure of one of two complementary angles is six less than twice the measure of the other.

26. The difference between the measures of two supplementary angles is 42.

27. A supplement of an angle is six times as large as a complement of the angle.

28. Three times the measure of a supplement of an angle is eight times the measure of a complement of the angle.